CLAIMS

What is claimed is:

1. A microfabrication process for fabricating a microelectromechanical systems device, comprising:

depositing one or a stack of layers on a substrate;

patterning said one or a stack of layers;

depositing a middle layer on said one or a stack of layers; and

patterning the middle layer using said one or a stack of layers as a photomask.

- 2. The method of claim 1, wherein the substrate permits light to pass therethrough.
- 3. The method of claim 2, wherein the substrate comprises glass.
- 4. The method of claim 1, wherein patterning said one or a stack of layers comprises forming longitudinally spaced grooves therein.
- 5. The method of claim 4, wherein patterning said middle layer comprises exposing said middle layer to light passed through the grooves in the one or a stack of layers.
- 6. The method of claim 1, further comprising depositing top layer over said middle layer.

- 7. The method of claim 1, wherein said one or an uppermost layer of said stack of layers is a sacrificial layer.
- 8. The method of claim 1, wherein the said middle layer comprises a negative- acting-photosensitive material.
- 9. The method of claim 6, wherein said top layer comprises nickel and aluminum.
- 10. The method of claim 6, further comprising patterning said top layer.
- 11. The method of claim 5, further comprising developing said middle layer to form longitudinally spaced ridges in the said middle layer disposed in the grooves in said one or a stack of layers.
- 12. The method of claim 11, wherein said top layer is patterned to define transversely extending strips which are supported by the longitudinally spaced ridges in the said middle layer.
- 13. A method for fabricating a microelectromechanical systems device, the method of comprising:

- a) depositing one or a stack of layers on a base layer, said one layer or an uppermost layer in said stack of layers being a sacrificial layer;
- b) patterning said one or a stack of layers to provide at least one aperture therethrough through which said base layer is exposed;
- c) depositing a photosensitive layer over said one or a stack of layers;
 and
- d) passing light through said at least one aperture to expose said photosensitive layer.
- 14. The method of claim 13, wherein the base layer is a substrate layer.
- 15. The method of claim 13, wherein said light comprises ultraviolet light.
- 16. The method of claim 13, wherein said photosensitive layer comprises a negative-acting-photosensitive material.
- 17. The method of claim 13, further comprising depositing a structural layer over said photosensitive layer.
- 18. The method of claim 17, further comprising removing said sacrificial layer.
- 19. The method of claim 18, wherein said steps (a) to (d) are repeated at least once, wherein each structural layer defines the base layer.